

	ENGINEERING AND GENERAL SERVICES DEPARTMENT 276 Fourth Avenue, Chula Vista, CA 91910 Phone: (619) 691-5021 Fax: (619) 691-5171	STANDARD PERMANENT BMPs REQUIREMENTS
	FORM 5501	

Section 1 - Checklist

This form is to be completed if, in completing Form 5500, it is determined that the project is not a Priority Development (SUSMP) Project. Complete the following checklist to determine the applicability of Standard Permanent BMPs to the project. Sign the Certification Statement in Section 2 of this form and submit it with your permit application package.

If one or more questions in the following checklist are answered Yes, the project is subject to the applicable Standard Permanent BMPs requirements identified in Section 3 of this form. If all answers are No, the project is exempt from Standard Permanent Storm Water BMPs.

	Does the project propose:	Yes	No	Applicable BMPs (refer to Section 2 of this form)
1	New impervious areas, such as rooftops, roads, parking lots, driveways, paths, and sidewalk?			A.1, A.2, B.1, C.1, C.2, C.8, C.11
2	New pervious landscape areas and irrigation system?			A.1, A.2, B.4, C.10
3	Permanent structures within 100 feet of any natural water body?			A.1, A.2, A.3
4	Trash storage areas?			B.3
5	Liquid or solid material loading and unloading areas?			B.2, C.3
6	Vehicle or equipment fueling, washing, or maintenance areas?			C.4, C.5, C.6, C.7, C.9
7	Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (other than Construction)?*			Applicable BMPs
8	Commercial or industrial waste handling or storage, excluding typical office or household waste?			B.2, B.3, C.3, C.6
9	Any grading or ground disturbance during construction?			A.1, A.2, A.3, C.10
10	Any new storm drains, or alteration to existing storm drains?			A.3, B.1, C.11

*To find out if the project is required to obtain an individual NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board website at, www.swrcb.ca.gov/stormwtr/industrial.html Applicable BMPs shall be selected from Section 3 of this form.

Section 2 - Certification The property owner must sign this section certifying that they understand the City's standard permanent BMPs requirements for storm water management on development and redevelopment projects and will implement and maintain the selected BMPs and ensure that mechanisms are in place to properly and effectively maintain the selected BMPs. The following certification must be signed and submitted with the permit application package.

I have read and understand that the City of Chula Vista has adopted Standard Permanent BMPs requirements for storm water management of development projects. I certify that the BMPs applicable to the project as marked in the Checklist in Section 1 of this form will be implemented to effectively minimize the potentially negative impacts of this project on storm water quality. I further agree to ensure that mechanisms are in place to properly and effectively maintain the implemented BMPs. I also understand that non-compliance with the City's Storm Water and Grading Ordinances may result in enforcement action by the City including citations, civil penalties, or other actions as provided in the Chula Vista Municipal Code.

Property Owner Name: _____ Signature: _____ Date: _____

Section 3 Standard Permanent BMPs

Development Projects subject to standard permanent BMP requirements shall complete and incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. The City may approve proposed alternatives to the BMP requirements in this Manual if said alternatives are determined by the City to be applicable and equally effective. Also, additional BMPs, analysis or information may be required by the City to enable staff to determine the adequacy of proposed BMPs, and will be requested through the project review process. Refer to Sections 2.I.1 and 2.II of this Manual, Permanent Storm Water BMP Requirements and Prepare & Submit Appropriate Plans, for guidance in the BMP design process.

Projects shall incorporate, where applicable, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- BMPs for Individual Project Categories

The series of BMPs listed below have been organized sequentially to allow the applicant and design professional to incorporate the site design, source control BMPs, and where necessary, requirements applicable to individual project categories in this progression. Detailed descriptions and requirements of BMPs are provided in Section 6 of this Manual.

A. Site Design BMPs

A.1. Minimize Project's Impervious Footprint & Conserve Natural Areas

- a. Minimize impervious footprint.
- b. Conserve natural areas where feasible, consistent with the City's environmental regulations.
- c. Where feasible and practical, as determined by the City Engineer, construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces.
- d. Construct streets, sidewalks and parking lot aisles to the minimum acceptable widths.
- e. Maximize canopy interception and water conservation.
- f. Use natural drainage systems to the maximum extent practicable.
- g. Other site design options that are comparable, and equally effective, as approved by the City.

A.2. Minimize Directly Connected Impervious Areas (DCIAs)

- a. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.

- b. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.
- c. Other design characteristics, which are comparable and equally effective, as approved by the City.

A.3. Protect Slopes and Channels

- a. Convey runoff safely from the tops of slopes.
- b. Vegetate slopes with deep-rooted native or drought tolerant vegetation.
- c. Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- d. Stabilize permanent channel crossings.
- e. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels.
- f. Other design principles, which are comparable and equally effective, as approved by the City.

B. Source Control BMPs.

B.1. Provide Storm Drain System Stenciling and Signage

- a. Provide stenciling, labeling, or stamping in fresh concrete with NO DUMPING signs.
- b. Post signs and prohibitive language and/or graphical icons which prohibit illegal dumping.
- c. Maintain legibility of stencils and signs.

B.2. Design Outdoor Material Storage Areas to Reduce Pollution Introduction

- a. Place hazardous materials in an enclosure or protect them by secondary containment structures.
- b. Pave storage areas with impervious pavements, graded to prevent run-on and run-off.
- c. Provide roof or awning over storage areas.
- d. Other methods, which are comparable and equally effective within the projects, as approved by the City.

B.3. Design Trash Storage Areas to Reduce Pollution Introduction

- a. Pave with an impervious surface, designed not to allow run-on from adjoining areas and screened or walled to prevent off-site transport of trash.
- b. Provide roof or awning to minimize direct precipitation and prevent run-off.
- d. Other design characteristics, which are comparable and equally effective, as approved by the City Engineer.

B.4. Use Efficient Irrigation Systems & Landscape Design, and Employ Integrated Pest Management Principles

- a. Design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm drainage system (Best Irrigation Practices). Consider and implement the following methods:
 - Employ rain shutoff devices to prevent irrigation during or after precipitation.
 - Design irrigation systems to each landscape area's specific water requirements.
 - Use flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
 - Provide water conservation educational materials to future residents/tenants.
 - Employ other comparable, equally effective, methods to reduce irrigation water runoff.
- b. Employ Integrated Pest Management Principles

Eliminate and/or reduce the need for pesticide use in the project design by:

- Planting pest-resistant or well-adapted plant varieties such as native plants.
- Discouraging pests by modifying the site and landscaping design.

Distribute IPM educational materials to future site residents/tenants. Minimally, educational materials must address the following topics:

- Keeping pests out of buildings and landscaping using barriers, screens, and caulking.
- Physical pest elimination techniques, such as weeding, squashing, trapping, washing, or pruning out pests.
- Relying on natural enemies to eat pests.

- Proper use of pesticides as a last line of defense.

C. BMPs Applicable to Individual Project Categories

C.1. Private Roads

- a. Rural swale system: Direct street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, culverts under driveways and street crossings.
- b. Urban curb/swale system (street slopes to curb): Install periodic swale inlets that drain to vegetated swales/biofilters.
- c. Dual drainage system: First flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder; high flows connect directly to storm water conveyance system.
- d. Other methods, which are comparable and equally effective within the project, as approved by the City.

C.2. Residential Driveways & Guest Parking

- a. Design driveways with shared access among multiple properties, flares (single lane at street), or wheel strips (paving only under tires); or drain into landscaping prior to discharging to the storm water conveyance system.
- b. Uncovered temporary or guest parking on private residential lots may be: paved with a permeable surface; or, designed to drain into landscaping prior to discharging to the storm water conveyance system.
- c. Other features which are comparable and equally effective, as approved by the City.

C.3. Dock Areas

- a. Cover loading dock areas, or design drainage to preclude run-on and runoff.
- b. Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.
- c. Other features which are comparable and equal effective, as approved by the City.

C.4. Maintenance Bays

- a. Repair/Maintenance bays shall be indoors or designed to preclude run-on and run-off.
- b. Design a repair/maintenance bay drainage system to capture all wash water, leaks, and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited. If required by the City, obtain an Industrial Waste Discharge Permit.
- c. Other features, which are comparable and equally effective, as approved by the City.

C.5. Vehicle Wash Areas

- a. Self-contained; or covered with a roof or overhang.
- b. Equipped with a clarifier or other pretreatment facility.
- c. Properly connected to a sanitary sewer, as approved by the City.
- d. Other features which are comparable and equally effective, as approved by the City.

C.6. Outdoor Processing Areas

- a. Cover or enclose areas that would be the most significant source of pollutants; slope the area towards a dead-end sump; or, discharge to the sanitary sewer system following appropriate treatment in accordance with conditions established by the applicable sewer agency.

- b. Grade or berm area to prevent run-on from surrounding areas.
- c. Installation of storm drains in areas of equipment repair is prohibited.
- d. Other features which are comparable or equally effective, as approved by the City.

C.7. Equipment Wash Areas

Outdoor equipment/accessory washing and steam cleaning activities at projects shall meet the following requirements:

- a. Be self-contained or covered with a roof or overhang.
- b. Be equipped with a clarifier, grease trap, or other pretreatment facility, as appropriate.
- c. Be properly connected to a sanitary sewer after first obtaining a permit from the City of San Diego Metropolitan Wastewater Department.
- d. Other features which are comparable or equally effective, as approved by the City.

C.8. Parking Areas

- a. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.
- b. Outdoor parking areas should be constructed with permeable paving, where feasible and practical. Permeable paving should be strongly considered for overflow parking (parking stalls provided in excess of the City of Chula Vista's minimum parking requirements).
- c. Other design concepts, which are comparable and equally effective, as approved by the City.

C.9. Fueling Area

- a. Provide overhanging roof structure or canopy.
- b. Pave with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited.
- c. Provide an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on.
- d. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.
- e. Other features which are comparable or equally effective, as approved by the City Engineer.

C.10. Hillside Landscaping

- a. Hillside areas disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the City of Chula Vista.
- b. Other features which are comparable or equally effective, as approved by the City.

C.11. Design of Drainage Systems for Industrial/Commercial facilities

- a. Avoid sheet flow of runoff to the street gutter.
- b. Provide filtration, infiltration, or other Best Management Practices satisfactory to the City of Chula Vista before discharging runoff to public storm drainage systems.
- c. The property owner or an approved private entity shall maintain all private storm drainage systems in perpetuity.
- d. The ongoing storm drainage systems maintenance records shall be kept on site indicating at the minimum: type of system, operator name, inspection/maintenance date, and maintenance activity type.